U.S. Department of Housing and Urban Development Office of Public and Indian Housing

PIC Visioning Session

Information Gathering and Listening Session w/PHA IT Professionals and Software Vendors

Detroit Field Office

May 28, 2015

PIC Current State

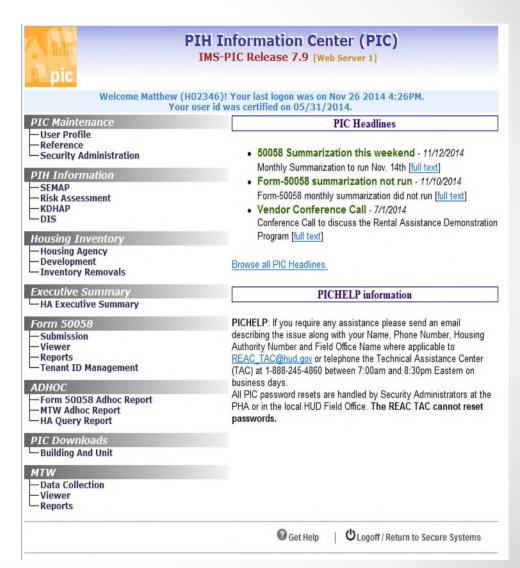
PIC design and funding

- PIC was designed in 1998-1999 as a replacement for both the IBS and the MTCS (form 50058) data systems. Neither offered HA access.
- PIC funding for system development, enhancements, and maintenance are insufficient and requires a more cost effective approach.
- PIC uses Microsoft SQL Server instead of HUD's standard platform and requires maintaining multiple platforms which are very costly.

What does PIC do?

PIC allows HAs to:

- Submit tenant data via the Form HUD-50058. This collects and verifies identity and income information for assisted tenants.
- Maintain building and unit data to provide a picture of our Public Housing inventory for funding.
- Maintain HA contact information so that HUD can reach HA staff.
- Submit inventory removal applications.
- Submit Capital Fund and Section 8
 Management Assessment Program
 certifications.



Why does PIC exist?



 PIC facilitates the exchange of information between PHAs and HUD. There are approximately 50+ vendors and PHA software packages that interface with PIC.



 PHAs are responsible for entering accurate information in PIC under rules at 24 CFR 908 for tenant information, 982 for Housing Choice Voucher, 990 for Operating Subsidy, 905 for Capital Funding, and 970 for Inventory Removals



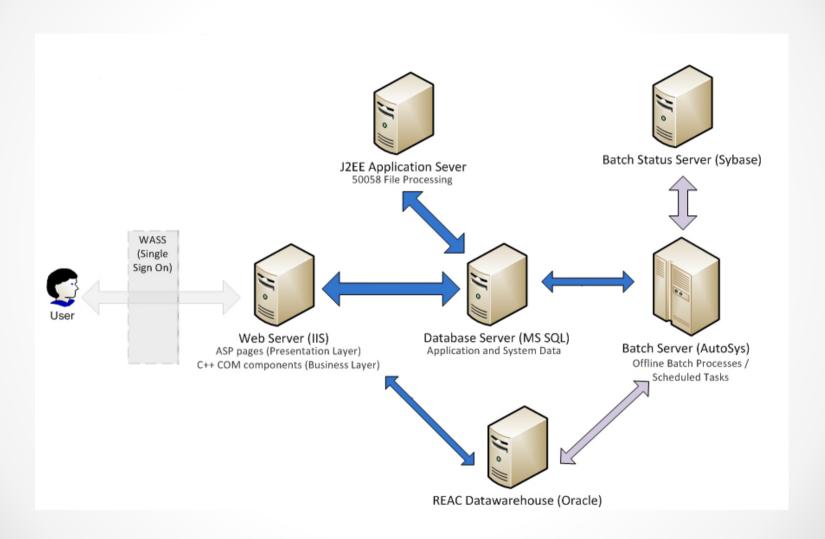
 HUD staff approve, monitor, and evaluate the information in PIC to identify and address potential management and occupancy issues.

Who Uses PIC and How Often?

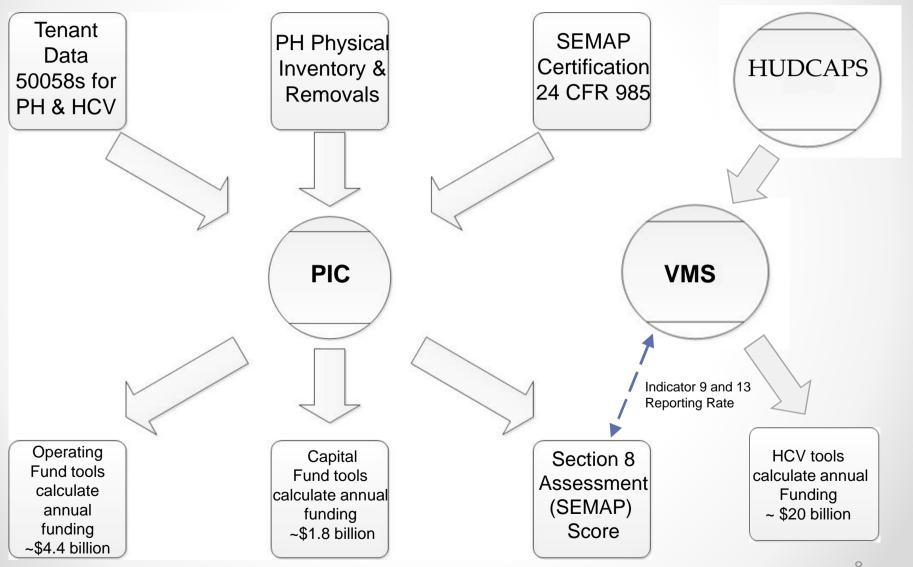
PIC User Type	Number of Active User Accounts
HUD Users (Includes HUD staff, Contractors and Super User types)	4,250
HA Users	44,200

Date	Unique Logins
10/01/2014 — 10/03/2014	6,356
10/6/20104 — 10/10/2014	9,384
10/13/2014 — 10/17/2014	7,727
10/20/2014 - 10/24/2014	9,363
10/27/2014 — 10/31/2014	10,132

Current PIC Infrastructure



PIC and VMS are the data sources used to fund and monitor all PIH programs



How Busy is PIC?

October 2014 HCV Tenant Form Uploads

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	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Totals
Week 1				26,167	14,709	12,252	518	53,646
Week 2	217	14,186	12,409	11,788	11,916	17,053	805	68,374
Week 3	312	6,651	11,737	13,165	12,477	9,692	1,082	55,116
Week 4	358	11,950	13,027	14,391	13,813	11,738	1,090	66,367
Week5	311	14,415	15,929	15,257	14,997	11,656		72,565
Totals	1,198	47,202	53,102	80,768	67,912	62,391	3,495	316,068

October 2014 PH Tenant Form Uploads

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	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Totals
Week 1				7,626	5,656	4,596	169	18,047
Week 2	73	5,941	4,969	4,194	4,379	4,402	252	24,210
Week 3	46	1,829	4,554	4,135	4,692	4,060	150	19,466
Week 4	202	5,314	4,484	4,489	4,615	4,899	150	24,153
Week5	131	7,481	5,402	5,885	7,478	6,473		32,850
Totals	452	20,565	19,409	26,329	26,820	24,430	721	118,726

October 2014 PH Unit Status Changes

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	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
Week 1				4,663	1,936	2,661	113	9,373
Week 2	78	1,745	1,316	1,215	1,316	1,434	114	7,218
Week 3	68	677	1,314	1,529	1,342	1,462	100	6,492
Week 4	38	1,428	1,137	1,032	1,131	1,450	117	6,333
Week5	60	1,231	1,205	1,091	1,508	4,704		9,799
Totals	244	5,081	4,972	9,530	7,233	11,711	444	39,215

Fatal errors cause delay or loss of data to be delivered to HUD

	Forms with Fatal Errors	Percent of Forms with Fatal Errors	Total Forms with Warnings	Percent of Forms with Warnings
October 2014	43,972		34,552	
Weekly Averages	10,993	6.0%	8,638	4.7%

- Fatal errors are mistakes on the form that prevent us from accepting the record:
 the HA needs to correct fatal errors for them to accepted
- Warnings are data/items that fall outside of expected ranges but are accepted and flagged for the HA to verify
- Approximately 528,000 forms rejected each year. Approximately 415,000 thousand forms with warnings for over a million from a year that require correction or review

Why do we need to improve PIC?

- Outdated, unstable system software
- System design makes managing data quality challenging
- A significant investment is needed to perform all fixes and upgrade to a stable platform
- Unable to fully utilize BI tools

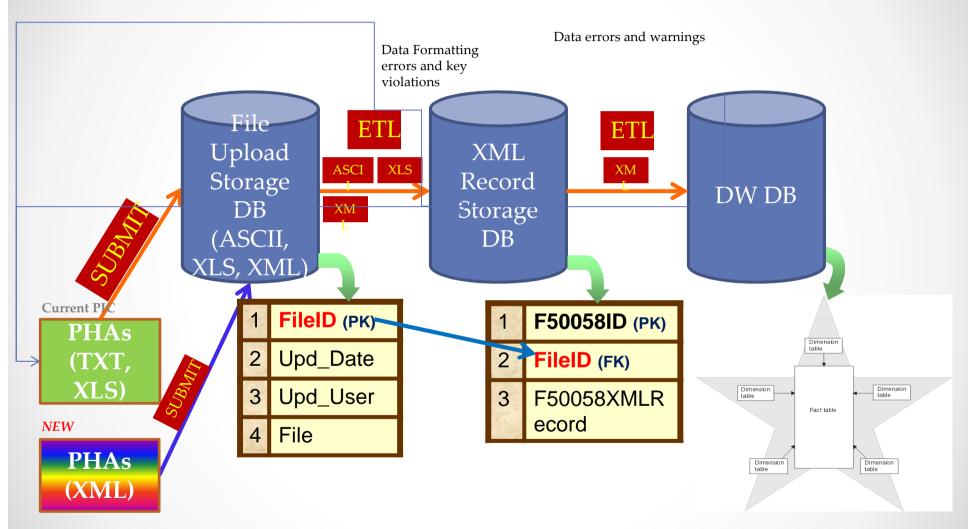
Conceptual Solution

Who will use the proposed new system?

PIC User Type	Number of Active User Accounts
HUD Users (Includes HUD staff, Contractors and Super User types)	4,250
HA Users will only access Business intelligences reports	Common interface to all PIH business reports
HA System interfaces	44,200 ~ 50 vendors and HAs that write their own software for ~ 3,900 connections from the PHA networks

Note: The PHA staff will continue to log in and enter data in their local systems but will no longer be required to login into PIC to transfer or enter data.

Concept to receive and store the data

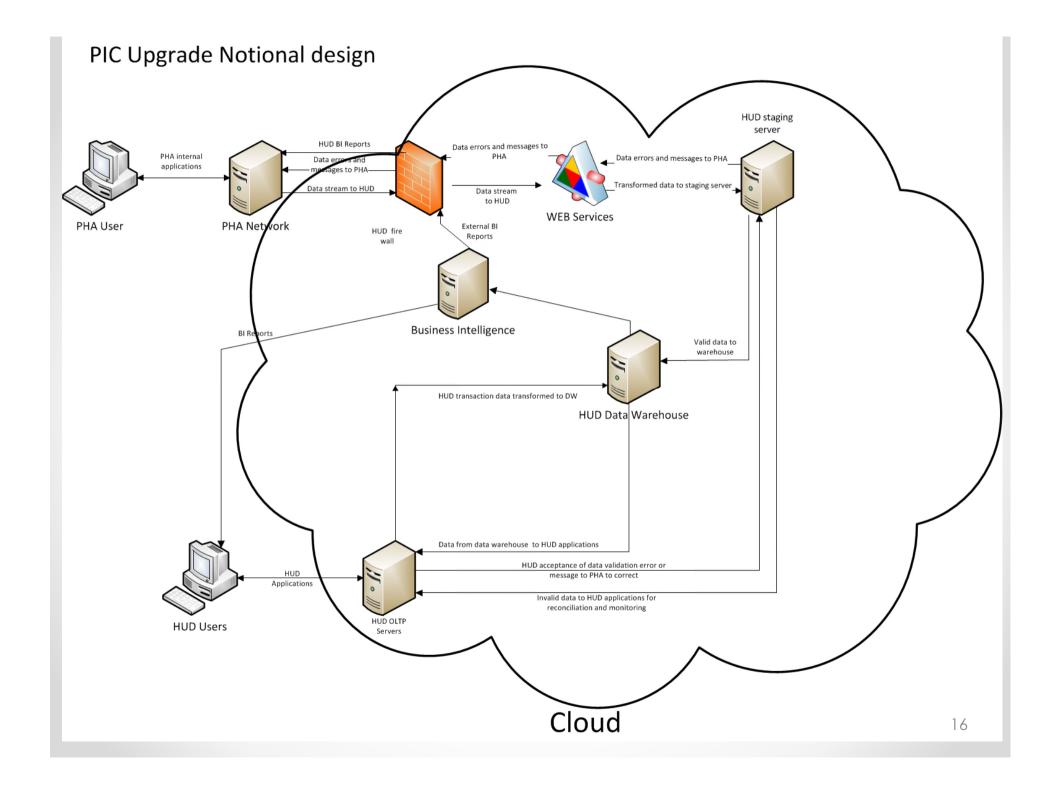


- Current file formats will continue to be supported
- XML protocol will be developed to modernize the transfer process

Notional System Concept (Business function view)

PHA network 50058 + VMS Error Notification Bldg and unit Op Fund Special Transform Data data and PHA Data **Demo Dispo apps** absorbed warehouse error **PBV** inventory OLAP (Cloud DB) check PHA contacts info **Future data needs** Con 20 Formula data (Unit months 50058 household data PHA Data Business From Cloud **HUD** secure systems Intelligence Tools NGMS: BFF, PMRT. Cash... **Transform** Audit actions and and load **Funding Activities** (Source Data **Risk Management** Approximately 5 data Capital fund Pre populated 50058 - 10% of current **Funding activities** PIC data) Funding calculations **Operating fund Pre-populated Op** Demo Dispo fund forms (23,22) Review and **HCV Formula** Pre-populated demo dispo forms **Future forms and CFO Financial Datamart**

systems



Housing Agencies will realize a significant Administrative Burden Reduction

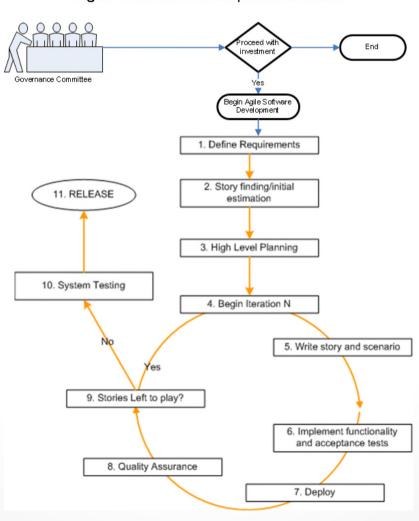
- No time lost due to system not processing 50058 submittals because of "fatal errors", and incomplete or incorrect data.
- Access to internal HUD reports showing analytical data for similar size HAs.
- Automatically populates the 50058 form with all tenant information upon entering ID.
- Once data becomes reliable the 50058 data could be used to populate much of VMS.

PIC improvements are planned to deploy in the Cloud

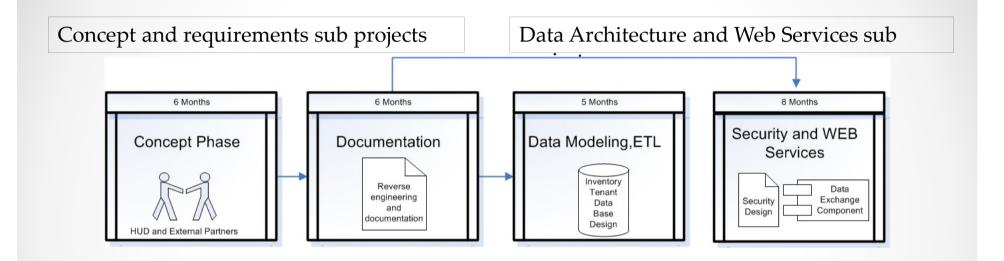
HA Advantages	HUD Advantages
 Creates the ability to combine functions of PIH information systems into one simplified system. (Future) 	 Less expensive to design and maintain
 No upload denial – Targeted incorrect upload data dramatically decreases Admin burden ~ 250,000 hours reduced 	No hardware or software upgrades
 Prepopulated tenant form 50058s 	 No system fixes – data validation only
 Simplified user access and roles 	 Continuity of operations
 PHA users work in their own systems and data streams to HUD 	 Oracle database that can be adopted by NGMS
Ease of data correction	 Transition to monitoring data from data approvals (ERM friendly)
 Frees HA staff to mission of assisting tenants instead of feeding data to HUD 	 Allows more time to be devoted to business intelligence rather than system operations

The software will be developed using an Agile Process

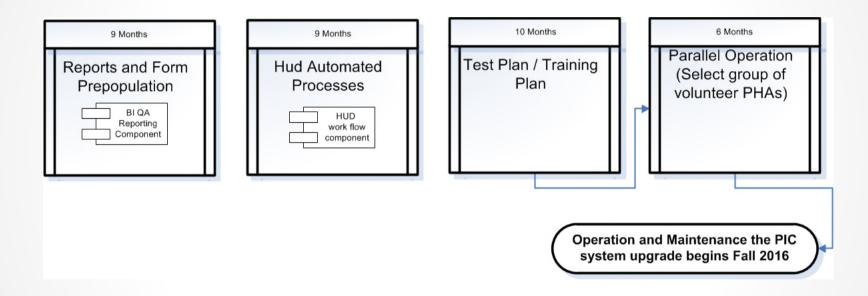
Agile Software Development Method



PIC Improvement Project Concept



PIC Improvement Project Concept



Questions/Feedback